## Message

From: Martin, Allen D [Allen.Martin@ncdenr.gov]

**Sent**: 3/21/2019 9:12:13 PM

To: Culpepper, Linda [linda.culpepper@ncdenr.gov]; Strynar, Mark [Strynar.Mark@epa.gov]; Lindstrom, Andrew

[Lindstrom.Andrew@epa.gov]; Aker, Sandra [Aker.Sandra@epa.gov]

CC: Karoly, Cyndi [cyndi.karoly@ncdenr.gov]; Gregson, Jim [jim.gregson@ncdenr.gov]; Johnson, Chris

[chris.johnson@ncdenr.gov]; Allenbach, Becky [Allenbach.Becky@epa.gov]

Subject: RE: PFAS Lab Test Methods - Request Support for Review

We can go ahead and request them. Stability shoudn't be an issue. We don't have everything in place yet but I can start optimizing them on the instrument.

Allen

From: Culpepper, Linda

Sent: Thursday, March 21, 2019 10:49 AM

To: Martin, Allen D <Allen.Martin@ncdenr.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom.andrew@Epa.gov;

Aker, Sandra < Aker. Sandra@epa.gov>

Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Gregson, Jim <jim.gregson@ncdenr.gov>; Johnson, Chris

<chris.johnson@ncdenr.gov>; Allenbach, Becky <Allenbach.Becky@epa.gov>

Subject: RE: PFAS Lab Test Methods - Request Support for Review

Thank you, Allen. Yes, we need to request the solutions. Better to request them now? Shelf-life issues?

Mark, Andy and Sandra – sharing Allen's comments with you. He is our new chemist getting our new MS online. Chris has just hired our second new chemist, who will start in April.

Appreciate your help in reviewing the proposal.

Linda

Linda Culpepper Director, NC DEQ Division of Water Resources

Email: linda.culpepper@ncdenr.gov

Phone: 919-707-9014

From: Martin, Allen D

Sent: Thursday, March 21, 2019 10:36 AM

To: Culpepper, Linda < linda.culpepper@ncdenr.gov >; Johnson, Chris < chris.johnson@ncdenr.gov >

Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Gregson, Jim <jim.gregson@ncdenr.gov>

Subject: RE: PFAS Lab Test Methods - Request Support for Review

Good Morning Linda,

I've read through the Determination of Table 3 and the SOP from Eurofins, I have a few comments below.

The method developed by Chemours appears to be direct inject with no extraction. It's inclusive of their products not currently captured by 537.1 with the exception of "GenX". Their methodology is consistent with what I would expect for this type of analysis. They are bracketing their sample sequences with a full calibration, which should improve data

quality. I assume they're doing this as an added precaution since they're not using externally sourced standards. They are using standard recovery limits for their QC samples.

The method from Eurofins is a modified 537.1 method. They have expanded the analyte list beyond what's in 537.1 and they're also using isotope dilution for quantification. I did take note that they're not using the branched isomers of PFOS, PFHxS, NetFOSAA and MeFOSAA in their calibration curves. I'm not sure what the rationale for that is. They do analyze a solution at the mid-point of the curve that contains the previous analytes and their branched isomers. This is simply done for the analyst so they know how to fully integrate the analytes in real samples. As such it seems that they are capturing the linear/branches isomers when they analyze real samples, they're just not including them in the calibration. The extraction/cleanup was left out as "proprietary", as I would expect.

I did notice Chemours mentioned they could send us solutions of these "plus" compounds. Would it be possible to request those? It would be nice to have them on hand.

Just let me know if you have any questions or if I can be of any assistance.

Allen

Allen Martin
Public Health Scientist
Water Sciences Section - Division of Water Resources

919.733.3908 x236 Allen.martin@ncdenr.gov

From: Culpepper, Linda

Sent: Monday, March 18, 2019 8:59 PM

**To:** Johnson, Chris <<u>chris.johnson@ncdenr.gov</u>>; Martin, Allen D <<u>Allen.Martin@ncdenr.gov</u>> **Cc:** Karoly, Cyndi <<u>cyndi.karoly@ncdenr.gov</u>>; Gregson, Jim <<u>jim.gregson@ncdenr.gov</u>>

Subject: FW: PFAS Lab Test Methods - Request Support for Review

Chris/Allen – need quick review this week of the attached Chemours submittals, especially on lab methods for your review.

We've asked EPA for review support and our Fayetteville staff and Julie Grzyb are looking at the sampling location's. The Dec. 2018 sampling plan mentioned in the below email is the last document attached.

Any questions, please let me know. Thanks for your help, Linda

Linda Culpepper Director, NC DEQ Division of Water Resources

Email: linda.culpepper@ncdenr.gov

Phone: 919-707-9014

From: Culpepper, Linda

**Sent:** Monday, March 18, 2019 4:45 PM

**To:** Strynar, Mark < <a href="mailto:Strynar.Mark@epa.gov">Strynar, Mark <a href="mailto:Strynar.Mark@epa.gov">Strynar.Mark@epa.gov</a>>; 'Aker, Sandra' <a href="mailto:Aker.Sandra@epa.gov">Aker.Sandra@epa.gov</a>>

Subject: FW: PFAS Lab Test Methods - Request Support for Review

We are trying to locate a referenced Geosyntec Report from December 2018 and forward it. Several of us cannot find it in our emails. Will forward upon receipt.

Additionally, Chemours has indicated that their chemist Dr. Lam has been in coordination with Dr. Strynar in developing the draft test method and workplan, and that Mark can talk with Dr. Lam if there are questions.

Is there time for Mark to help with this review? Other thoughts?

Thank you, Linda

Linda Culpepper Director, NC DEQ Division of Water Resources

Email: linda.culpepper@ncdenr.gov

Phone: 919-707-9014

From: Culpepper, Linda

Sent: Tuesday, March 12, 2019 3:32 PM

To: Allenbach, Becky < Allenbach.Becky@epa.gov >; Buckley, Timothy < Buckley.Timothy@epa.gov >

Subject: PFAS Lab Test Methods - Request Support for Review

As part of the Consent Order, Chemours has provided the attached test methods and workplan. Wondering if EPA can provide support in reviewing these? Thought I'd reach out at the same time to both of you.

## Linda

Linda Culpepper Director, Division of Water Resources North Carolina Department of Environmental Quality

1611 Mail Service Center Phone: 919-707-9014

Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties

From: Long, Brian D

Sent: Wednesday, January 30, 2019 9:03 PM

To: Culpepper, Linda

**Cc:** <u>Abraczinskas, Michael; Scott, Michael; Lane, Bill F; Benzoni, Francisco; Shelton, Dave; JFSavarese@WLRK.com; kemp@cfrw.us; ggisler@selcnc.org; Compton, Christel E; Gross, Joel M.; brian.israel@arnoldporter.com; Allison Rumsey; Tom Santoro</u>

Subject: [External] Submission Pursuant to Proposed Consent Order Paragraph 11.a

External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to report spam@nc.gov

Dear Ms. Culpepper,

Please see the attached cover letter and documents pursuant to the Proposed Consent Order Paragraph 11.a.

Sincerely,

Brian D. Long

Plant Manager - Fayetteville Works, Chemours™ Fluoroproducts

The Chemours Company 22828 NC Highway 87W Fayetteville, NC 28306

Brin O Lay



LinkedIn | Twitter | Chemours.com

This communication is for use by the intended recipient and contains information that may be privileged, confidential or copyrighted under applicable law. If you are not the intended recipient, you are hereby formally notified that any use, copying or distribution of this e-mail, in whole or in part, is strictly prohibited. Please notify the sender by return e-mail and delete this e-mail from your system. Unless explicitly and conspicuously designated as "E-Contract Intended", this e-mail does not constitute a contract offer, a contract amendment, or an acceptance of a contract offer. This e-mail does not constitute a consent to the use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Italiano Deutsch Portuges Espanol Japanese Chinese Korean

https://www.chemours.com/Chemours Home/en US/email disclaimer.html